

H. MAJOR RESEARCH AND PUBLIC SERVICE ACTIVITIES

1. Research & Development Expenditures, 2010-2011

Item	Amount (\$)
Federally Financed Academic R&D Expenditures	550,338
Institutionally Financed Academic R&D Expenditures	947,177
Total Academic R&D Expenditures	1,497,515

Source: Office of Research and Sponsored Programs, Kean University 2011

Note: Dollar amount as reported to the National Science Foundation (NSF) on Form #411 (Survey of Research and Development Expenditures at Colleges and Universities).

2. Externally Sponsored Research

The Office of Research and Sponsored Programs (ORSP) seeks external funding to support and enhance faculty and student research, curricular development and innovation, and community outreach programming. The Office administers the University's grants and contracts (internal and external) from the pre-award stage through final reporting, and provides oversight to Kean's centers and institutes. ORSP serves as the University's liaison with public foundations, and is responsible for compliance regarding federal and state regulations. The following table lists the externally sponsored research programs by award amount:

Project Director	Project Title	Agency	Amount (\$)
De Garcia, William	The Exceptional Educational Opportunities	New Jersey Commission on Higher Education	1,137,025
Martin, Arlene	Professional Impact New Jersey	New Jersey Department of Human Services	990,838
Kelly, Audrey	Local Fire Fighters Training	New Jersey Department of State	829,202
Baldwin, Brian	Math and Science Partnership	New Jersey Department of Education	584,069
Polirstok, Susan	Garden State Partnership for Teacher Quality	United States Department of Education	420,350
Knezek, Claudia	Traffic Safety Program	New Jersey Division of Highway Traffic Safety	312,424
Jackson, Veronica	Project U - Upward Bound	United States Department of Education	299,650
Polirstok, Susan	New Vistas Teachers Project	United States Department of Education	259,580
Beaugris, Jennifer	McNair Scholars	United States Department of Education	220,000
Campbell, Minnie	New Jersey Nursing Education Collaborative	Robert Wood Johnson Foundation	209,849
Shulman, Martin	Speech Upgrade	New Jersey Department of Education	175,755
Cerda, Victoria	Hispanic Foster Care - Hudson	New Jersey Division of Youth and Family Services	169,641

Kostak, Mira	The New Jersey Small Business Development Center - Operational Support	United States Small Business Association	164,320
Searson, Michael	Kean Startalk 2011-Hindi 2.0	National Foreign Language Center	118,800
Caceres, Jose	New Jersey AIM Academy Initiative	New Jersey Commission on Higher Education	115,129
Toney, Jeffrey	Garden State LSAMP (Louis Stokes Alliance for Minority Participation)	National Science Foundation	100,608
Cerda, Victoria	CARAS Metro Family	New Jersey Division of Youth and Family Services	90,000
Tomich, Melissa	Irvington Enrichment Program	Irvington Public Schools	83,254
Foreman, Lindy	Mature Women Students	Newcombe Foundation	82,000
Porta, Angela	AREA Grant: Claudin-2, Claudin-12 and Cadherin-17: Novel Targets of Vitamin D Action	National Institutes of Health	79,049
Qi, Feng	AREA-Influenza Transmission	National Institutes of Health	75,634
Best, Linda	National Writing Project	National Writing Project	46,000
Murphy, Charlie	Highlands to Piedmont	National Science Foundation	43,030
Polirstok, Susan	Professional Development in Sheltered English Instruction	New Jersey Department of Education	40,000
Duke, Phyllis	Incredible Edible School Garden at Liberty Hall	The 1772 Foundation	37,500
Dobosiewicz, John	Environ Mentors for the Elizabeth River/Arthur Kill Watershed	New England Interstate Waster Pollution Control Commission	34,508
Foreman, Lindy	Rummel Scholars	Rummel Foundation	30,000
Campbell, Minnie	Advanced Education Nursing Traineeships	Health Resources Services Administration	28,077
Lightfoot, Alan	NJ Child Welfare Training Consortium	Rutgers University	27,813
Smith-Sebasto, Nicholas	Shredder for Composter	New Jersey Department of Environmental Protection	26,000
Parks, David	Live Scan/Mugs hot Photo Workstation	New Jersey Office of Homeland Security	25,831
Bellitto, Christopher	Enduring Questions	National Endowment for the Humanities	25,000
Toney, Jeffrey	Merck Institute for Science Education/AAAS	Merck Scientific Research Institute	20,000
Wooten, John	Premiere Stages	New Jersey State Council on the Arts	18,135
Morreale, Patricia	Summer High School Institute	Google	15,000
Lorentzen, Laura	NJCSTM Scholarships	Wachovia Corporation	15,000

Porta, Angela	Research Supplement	National Institutes of Health	14,371
Kostak, Mira	Small Business Development Center	New Jersey Small Business Administration	14,218
Santo Pietro, Mary Jo	Institute for Adults Living with Communication Disabilities	Kessler Foundation	12,800
Kostak, Mira	CDBG Program	City of Elizabeth	10,000
Foreman, Lindy	The Robert Sydney Needham Scholarship Program	The Robert Sydney Needham Foundation	10,000
Reilly, Kristie	MBA Lecture Series	TD Bank	10,000
Smith-Sebasto, Nicholas	Creating a Resource Recovery Next Generation	National Science Foundation	9,560
Shuman, Martin	Speech Upgrade Workshops	New Jersey Department of Education	9,500
Jackson, Veronica	Upward Bound Scholarships	Novartis	9,500
Chen-Hafteck, Lily	AIRS (Advancing Interdisciplinary Research in Singing)	University of Prince Edward Island	6,000
Jackson, Veronica	Upward Bound-Summer Food Service Program	New Jersey Department of Agriculture	5,751
Dobosiewicz, John	Connecting Youth to Science through Mentored Experiences in Nature	National Science Foundation-National Council for Science and the Environment	5,086
Caceres, Jose	Project Adelante	Aviation Development Council	5,000
Martin, Arlene	Professional Impact	Union Foundation	5,000
Reilly, Kristie	Gala	Verizon Foundation	5,000
Santo Pietro, Mary Jo	Institute for Adults Living with Communication Disabilities	Verizon Foundation	5,000
Manfrino, Carrie	The Hidden Fluorescent World of Coral Reefs	National Science Foundation	3,000
Balakian, Jan	Why American Plays Matter?	New Jersey Council for the Humanities	3,000
		Total	7,091,857

Source: Office of Research and Sponsored Programs, Kean University 2011

3. Internally Sponsored Research

Kean University established the Reassigned Time for Research (RTR) Awards program to support the faculty's active interest in research and other scholarly pursuits in 1973. Through this program, the University conducts an annual review and selects faculty, professional personnel, and librarians to receive research awards of released time and limited direct costs. Projects funded by Reassigned Time for Research serve to advance the state of the art or knowledge in a particular field of study or professional activity, or to develop a particular area of research or creative work to the point where it can be shared beyond the Kean University community.

Six RTR projects were funded for the 2010-11 academic year. Successful applicants receive a maximum of six credits of reassigned time during the academic year and a \$400 stipend for equipment, supplies and other needs associated with their research.

Two non-tenured faculty research projects (UFRI) were funded for the 2010-11 academic year. As with the RTR awards, successful applicants receive six credits of reassigned time during the academic year and a \$400 stipend for equipment, supplies and other needs associated with their research.

The Students Partnering with Faculty (SpF) Summer Research Program is a competitive program that has been developed to support and advance student and faculty research and scholarship at Kean University. Through the SpF program, full-time faculty will have the opportunity to submit proposals in collaboration with undergraduate full-time students enrolled in the current semester for the purpose of attaining funding toward a specific student-faculty research project. Students and faculty each receive \$3,500 stipends and up to \$2,000 for research supplies and expenses. Twelve projects were funded during summer 2010.

The Foundation Faculty Research Award (FFRA) is sponsored by the Kean University Foundation and was initiated this academic year. The fundamental goal of FFRA is to help faculty better position themselves to apply for and receive external funding for their research and scholarly activities. Faculty can apply annually for three consecutive years of funding for up to \$5,000 annually. Five faculty members received this award for the 2010-2011 academic year.

The Presidential Scholars Challenge (PSC) funds faculty research initiatives in areas important to the strategic vision and core initiatives of the University. The grant provides bridge support to faculty researchers who then pursue external funding to continue their research program. Eight faculty received award amounts ranging from \$15,000 to \$68,000

Reassigned Time for Research Awards (RTR)

Choral Composition with Concert Presentation
Matthew Halper, Music

Contemporary Roles and Responsibilities of School Nurses in the United States
Cheryl Krause-Parello, Nursing

Using Information Communication technology (ICT) to Connect Multiple Learning Contexts: The Impact of ICT on Parental Involvement and Student Achievement
Dina Rosen, Early Childhood & Family Studies

Inappropriate Disclosure Requests: Types, Functions, Reactions and Nonverbal Behaviors
Jack Sargent, Communication

Myths and Misconceptions in Education: Power of Media and New Technologies in Developing Critical Autonomy and Global Competency among Teacher Candidates
Melda Yildiz, School of Global Education and Innovation

Modeling Supply Chain Systems with Quantity and Lead Time Constraints
Bin Zhou, School of Management, Marketing, and International Business

Untenured Faculty/Librarian Research Initiative Awards (UFRI)

Discovery of New Therapeutic Agents that Overcome Multi-Drug Resistance in Tumors using Computational Molecular Modeling Techniques.
Sonia Arora, New Jersey Center for Science, Technology and Mathematics

"How To, or Make Knowledge in the Early Modern Instructional Manual"
Elizabeth Hyde, History

Students Partnering with Faculty Summer Research Program Awards (SpF)

Attitudes of teacher candidates toward video reflection using tagging software for self assessment
Jessica Adams (Faculty), Keri Schultz (Student), Raz Avraham (Student), Kristin Daugherty (Student)

Preclinical Evaluation of T115 Combination Regimens for Colorectal Cancer
Sonia Arora (Faculty), Carlos Garcia (Student), Jessica Merrill (Student), Victoria Pirolli (Student)

New literacy narratives from an urban university: Analyzing stories about reading, writing and changing technologies
Sally Chandler (Faculty), Lorena Ramirez (Student), Ryan Valdez (Student)

A Meta-Analysis of Research Studies on the Quality of Early Childhood Programs
Jennifer Chen (Faculty), Kristen Huisman Farhat (Student), Dana Bladon (Student)

Phase II" Morphologic Investigation of Thunderstorm Initiates and GIS Attributes
Paul Croft (Faculty), Danielle Fadeski (Student), Alexis Ottati (Student), Jackie Parr (Student)

The Lion Sleeps Tonight: The Autobiography of Jay Siegel, The Lead Singer of the Tokens
Frank Esposito (Faculty), Gerard Garcia (Student), Kathryn Napolitano (Student)

Business Ethics and Shareholder Value
Caroline Flammer (Faculty), Zeina Barton (Student), Vanessa Mortillaro (Student), Magdalena Oleksiewicz (Student)

On Software Security Breach Resulting from Embedded Sleeping Agents
Jing-Chiou Liou (Faculty), Sujith Bhashyam (Student), Gregory M. Egan (Student), Jay K. Patel (Student)

Identifying Dataset Patterns for Knowledge Discovery
Patricia Morreale (Faculty), Johana Callegari (Student), Francis Kendall (Student), Guillermo Valle (Student)

Wild Poets of Ecstasy: An Anthology of Ecstatic Verse
Donald Moores (Faculty), Matt Cavalier (Student), Denise Marando (Student), Christina Walling (Student)

How Schools Use Digital Tools to Connect Multiple Learning Contexts: An Empirical Study
Dina Rosen (Faculty), Kathy O'Connell (Student), Julia Reyes (Student)

Physiological and psychological responses of adolescents in online social interactions
Joanne Walsh (Faculty), Gregory Amodeo (Student), Joshua Friedman (Student)

Foundation Faculty Research Awards (FFRA)

Arboreal Negotiations: Andre Michaux, William Livingston, and the Cultural Politics of Trees in the Atlantic World
Elizabeth Hyde, History

Victims of Proximate Assault: Re-Reading Post-Traumatic Testimonies
Dennis Klein, History

Liberty Hall Manuscript Project -- Editing and Digitization
Jonathan Mercantini, History

Investigation of asymmetric bimetallic complexes with respect to bioactivity and charge separation
Matthew Mongelli, Chemistry Physics

Plant Ecology Components of Integrating Carbon Accounting and Environmental Integrity Assessment into Sustainable Wetland Conservation and Management
Daniela Shebitz, Biological Sciences

Presidential Scholars Challenge (PSC) and Presidents Research Initiative (PRI) Awards

Repurposing Old Drugs to Discover Multidrug Resistance (MDR) Modulators for Anti-Cancer Therapy
Sonia Arora, New Jersey Center for Science Technology and Mathematics

Identification of Ecological Drivers of the Carbon (C), Nitrogen (N), and Phosphorus (P) Cycles in Three Tropical Habitats in Costa Rica
William Eaton, School of Environmental and Life Sciences and Laura Lorentzen, New Jersey Center for Science, Technology and Mathematics

Microfinance - Sustainable Global Business and Education
Caroline Flammer, Graduate Management Studies and Dongmin Ke, Graduate Management Studies

Teaching Computational Thinking
Patricia Morreale, Computer Science and David Joiner, New Jersey Center for Science, Technology and Mathematics

A Novel Visualization of the Globalized World: Implications for Infectious Disease Transmission
Feng Qi, Geology and Meteorology

The Kean University Cochlear Implant Program: Meeting the Needs of New Jersey's Cochlear Implant Users Through Music and Speech-Language Therapy
Lyn Schraer-Joiner, Music, Alan Gertner and Carol Goodman, School of Communication Disorders and Deafness

Autism Spectrum Disorders, Brain Inflammation and Polyunsaturated Fatty Acids
Evros Vassiliou, Biological Sciences

Lean Supply Chain and Logistics Management in Small and Medium-Sized Enterprises (SMEs)
Bin Zhou, School of Management, Marketing and International Business

Source: Office of Research and Sponsored Programs, Kean University 2011